

## CLAIMS LISTING

1.(Previously Presented) A broadband slot antenna, comprising:  
a dielectric layer under which a microstrip feedline is formed;  
a ground formed on the dielectric layer and electromagnetically coupled with the  
microstrip feedline through a slot; and  
a reflection plane placed under the microstrip feedline and having an open part  
with predetermined length and depth in order to prevent board surface waves from  
being radiated and enhance antenna gain.

2.(Original) The antenna as recited in claim 1, wherein area of an entrance of the  
slot is the same as that of a bottom of the slot or area of the entrance of the slot is  
different from that of the bottom of the slot.

3.(Original) The antenna as recited in claim 1, wherein the reflection plane is a  
metal resonator.

4.(Previously Presented) A slot array antenna, comprising broadband slot  
antennas, wherein each of the broadband slot antennas includes:  
a dielectric layer under which a microstrip feedline is formed;  
a ground formed on the dielectric layer and electromagnetically coupled with the  
microstrip feedline through a slot; and  
a reflection plane placed under the microstrip feedline in order to prevent board  
surface waves from being radiated and enhance antenna gain,  
wherein a baffle layer is formed on the ground conductor in order to prevent  
mutual coupling between the slot antennas and enhance antenna gain.

5.(Original) The slot array antenna as recited in claim 4, wherein the baffle layer  
reduces the mutual coupling between the slot antennas while arranging the broadband  
slot antennas and enhances antenna gain.